

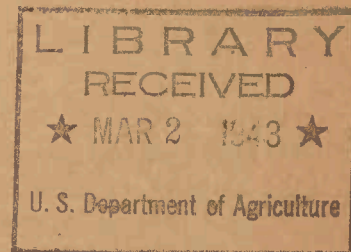
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UNITED STATES DEPARTMENT OF AGRICULTURE
U.S. Bureau of Agricultural Economics
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THE DAIRY LABOR SITUATION IN THE KANSAS CITY MILKSHED

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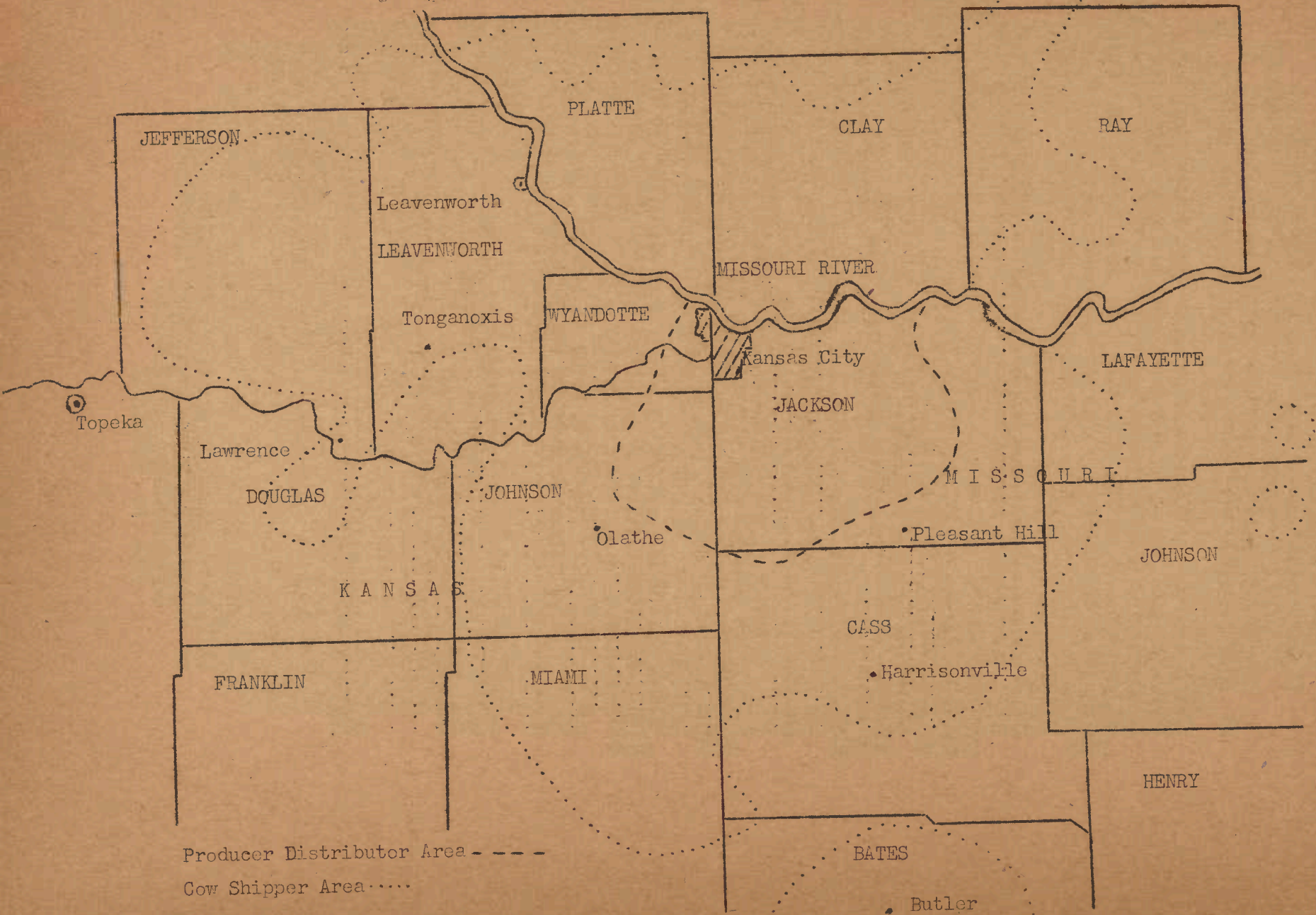
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Figure 1.- Greater Kansas City Milk Shed



SUMMARY

Supplies of inspected milk for Kansas City consumption have fallen below the needs of the market for the first time since the drought of 1934. Production of inspected milk by local producers in the fall of 1942 is 8 percent less than a year ago and total sales are up 35 to 40 percent. It has been necessary to obtain supplies from outside sources and to use some Grade C milk for bulk fluid milk deliveries. The increased demand for milk is the result of a large influx of war-plant workers in the milkshed and increased purchasing power due to fuller employment and higher wages. The anticipated increase of war-plant employment during the coming year will further maximize utilization of manpower and will step up local purchasing power with a resulting increased demand for milk.

Dairy cow slaughter has increased an estimated 15 percent. This indicates much more severe culling than that of 1941, and except for increases in cow numbers on many small farms and a few very large farms, it would be higher. Sales of cows have been more numerous than normal, chiefly because of discontent with returns from milk production and the unavailability of adequate labor at reasonable rates.

At present, there is a wide range in cash wages paid in the shed (\$40-150), but most wage rates are \$50 - 65 or \$95 - 110. The variation is related to size of dairy herd, distance from either market outlets or war-plant activity, and capability of worker. All farms are witnessing unusually rapid turn-over and continuously lower quality workers. Many think that higher wages (\$125-150) would be successful in meeting the competition of war-plant employment that has taken the majority of those workers quitting in recent months. Farmers who have moved wages up with the increase in labor demand of the last year have experienced less difficulty in holding experienced help. In some cases, improved housing is needed to assist the shift to married, older men. Short supplies of furniture handicap the housing of some married workers.

The labor supply of the area has been diminished drastically, and farmers have been tapping unusual sources with indifferent success. The regular hired labor force on surveyed farms has decreased 31 percent; and older men, women, and school children have been widely used. Estimated demand for 70,000 persons to meet increased war-plant employment next year and the demands for military service are expected to make this situation worse. Larger dairy farms dependent on skilled regular help have been hit badly, and now pay higher wages for poorer and less dependable help. The rate of turn-over has steadily increased. Uncertainty is especially discouraging to dairy operators who must provide adequate care for cows or see production fall off.

In general, farmers' incomes are not high enough to raise wages to competitive levels in the area. Because of this, farmers are insistent that higher prices for their product are necessary. The current attractiveness of other agricultural products is apparent. Farmers generally said that prices being received for whole milk were too low compared with prices for beef and pork. Many have switched at least a part of their resources to hogs.

So far as the market is concerned, all needs for byproducts and part of the needs for fluid milk have been met by introducing Grade C milk (from uninspected sources). More of this milk is available and, with proper incentives to producers, might be brought up to Grade A specifications. A seasonal increase of Grade A production will probably bring production more in line with needs in a few months; but maintenance of prices at present levels in view of alternative opportunities on and off the farm may create a serious failure of supply in the fall of 1943.

SUMMARY TABLE

Table 1.- Summarized comparison of dairy labor and milk supply situation in Kansas City milkshed - October 1941 - October 1942 1/

Item	Change
	Percent
Sales of milk ordinarily restricted to Grade A	✓ 35 to 40
Supply of Grade A milk	✓ 48
Number of producers, wholesale, Kansas City, Mo.	-6
Number of producer-distributors, Kansas City, Mo.	-30
Total farm labor force on 72 surveyed farms	-9.1
Number of regular hired workers on 72 surveyed farms	-31.1
Wage rates, cash	
Dairy hand	48
General farmhand	36
Dairy plantmen and routemen	✓ 15 to 20
Civilian industry and trade	✓ 10 to 25
Milk prices	
Retail and store	(no change)
Class I	✓ 10
Class II	✓ 11
Class III	✓ 19
Dairy cow slaughter (estimate)	✓ 15
Advertisements (Kansas City Star)	
Dairy cattle sales offerings	✓ 35
Dairy cow offered (total)	✓ 6
Single cows offered	✓ 55
Department store sales, Kansas City, Mo.	✓ 39
Bank Debits, Kansas City, Mo.	✓ 42
	Amount
Farm income (net cash) estimates	
Small dairy farms	\$1,089
Medium dairy farms	660
Large dairy farms	27

1/ For details of these items see tables in attached report.

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics

THE DAIRY LABOR SITUATION IN THE KANSAS CITY MILKSHED

This survey was made at the request of the Office of the Secretary of Agriculture to obtain information regarding the dairy labor situation in the Kansas City milkshed. Information was obtained on wage rates for workers on dairy farms, labor supply, changes in dairy farmers' income, maintenance of dairy cow numbers, and the milk supply and demand situation. Field work for the survey was done from November 17-21, 1942.

Three different approaches were used in the study:

- (1) Schedules were used to obtain information on changes in farm organization, wage rates, labor force, and labor turn-over. Seventy-two dairy farmers living in various parts of the Kansas City milkshed were interviewed. An attempt was made to get as representative a sample as possible by selecting farms of various herd sizes and localities according to their contribution to the fluid milk supply of the market.
- (2) Through group discussions with farmers having dairy herds of various sizes, typical budgets were developed for analyzing farmers' ability to pay wages. Two counties were selected for this phase of the study after consultation with technicians of the two States in the milkshed.
- (3) Secondary data and informed judgments were obtained from persons and agencies who had statistical information or whose work had developed a familiarity with the problems of the milkshed.

Three groups of farms were represented in the survey: (1) "small" dairy farms, with 8-15 cows; (2) "medium" dairy farms, with 16-30 cows; and (3) "large" dairy farms, with 31 cows or more. For certain of the analyses, the large dairy farms were again divided as to those with 31-45 cows and those with 46 cows and over.

The dairy herd size distribution of farms for which individual schedules were obtained, is as follows:

<u>Size of dairy herd</u>	<u>Number of farms</u>
Total	72
8-15 cows	27
16-30 "	28
31-45 "	9
46 cows and over	8

The Kansas City milkshed covers all or part of 16 counties in Missouri and Kansas (fig. 1). The more intensive dairy zone is adjacent to Kansas City. An outer fringe territory contributes considerable milk to the shed but has less intensive dairy enterprises. Field work for this survey was carried on in Jackson County, Mo. and Douglas and Johnson Counties, Kans. representing the "intensive dairy zone" and in the following counties representative of the "fringe dairy area": Bates and Clay in Missouri and Jefferson and Shawnee in Kansas.

I. WAGE RATES FOR DAIRY WORK

The responsibilities of workers and wage rates vary considerably on the dairy farms in the Kansas City milkshed. The hired workers on dairy farms are of two general types: (1) dairy workers and (2) general farm workers. In this survey, regular hired hands were classified as "dairy workers" when they usually performed no other work except that which was closely related to the dairy enterprise. The "general farm hand" may or may not have performed dairy work. It was only on farms having 16 cows and over that a "dairy worker" as such was employed. The dairy work on small herd farms was generally done by farm family labor with some hired general farm help. Many small herd farms hired only seasonal laborers.

Farms with 16-30 milking cows generally do not have specialized dairy jobs. Operators with larger herds do have some specialized dairy jobs such as milker (hand or machine) and milkhouse worker. Little, if any, wage differentials showed up between hand and machine milkers. It was reported that the farmers with milking machines usually operated such machines themselves if they had small or medium herds, but had their experienced hired men operate the machines in case of large herds. Workers inexperienced with dairy tasks are usually started as strippers where machines are used.

Wage Rates for Dairy Workers:

Wage rates not only vary with the requirements and responsibilities of a particular job, but also in similar jobs according to location of farms and capability (actual or imagined) of workers. The survey indicated that such differences are associated with size of dairy herd; the location of dairy farm in intensive or fringe dairy areas of milkshed; and the capability of the worker.

Data from the 72 farmers interviewed indicated a range in cash monthly wages for dairy workers of \$40-150 with an average of \$83 as of October 1, 1942 (table 2). Two distinct cash wage groups prevailed: \$50-65 and \$95-110 (table 12). This bi-modal distribution decreases the significance of the average monthly wage figure. The two prevailing cash wage groups were apparently associated with size of dairy herd and nearness to Kansas City. The operators having from 16-30 cows paid a prevailing monthly wage of \$50-65, whereas the farmers with larger herds generally paid the \$95-110 wage. Only one operator milking less than 31 cows paid \$90 or over, whereas 11 of the 20 operators milking over 30 cows paid \$90 or more.

Table 2.- Average monthly cash wages, by size of herd and by type of worker, October 1, 1941 and October 1, 1942.*

Size of herd <u>1/</u>	Date	Dairy workers	General farm workers <u>2/</u>	Foremen
		Dollars	Dollars	Dollars
8 to 15 cows	October 1, 1941	---	38	---
	October 1, 1942	---	41	---
16 to 30	October 1, 1941	52	42	55
	October 1, 1942	65	53	78
31 to 45	October 1, 1941	55	43	---
	October 1, 1942	77	61	---
46 and over	October 1, 1941	58	53	95
	October 1, 1942	89	75	135
All farms	October 1, 1941	56	45	82
	October 1, 1942	83	61	106

1/ Average number of cows milked during 1942.-

2/ Many of these also work in the dairy barn.

* Compiled from farm schedules.

An apparent relationship exists between prevailing wage rates and location of farms; that is, wages are generally higher on farms in the so-called intensive zone adjacent to Kansas City than on farms located in the fringe or some distance from the city 1/ (table 13). The prevailing October 1942 monthly wage for dairy workers in the intensive zone was \$95-\$110; in the fringe, it was \$50-\$65. It should be recognized, however, that practically all of the surveyed farms located in the fringe area have small herds of 30 or less milking cows, whereas most of those in the intensive zone have medium-sized to large herds. The sample is not large enough to permit accurate wage comparisons between the intensive zone and the fringe area for herds of various sizes. Consequently, it is not known whether the differences in prevailing wages are due primarily to size of herd or to location. Some of the range in dairy wage rates is due to differences in capability of the hired regular workers. Inexperienced dairy hands are often started at lower wage rates. A few adult handicapped hired workers were reported. These included older and retired men who have returned to help with dairy jobs.

Prevailing cash wage rates offered for dairy hands in the Kansas City fluid milkshed are about \$60 to \$85, according to representatives of the district United States Employment Service offices in Kansas City, Mo. and Lawrence, Kan.

1/ The intensive zone is composed of Jackson County in Missouri, and the two Kansas counties of Douglas and Johnson. The fringe counties are Jefferson and Shawnee in Kansas; Bates and Clay in Missouri.

These reported that prevailing or "going wage" rates are somewhat lower primarily because these are beginning wages than such rates obtained from the interviewed farmer and groups of farmers.

Dairy hand wages have generally moved up considerably during the last year. Information from the 72 surveyed farms indicated a monthly cash wage range of \$25 - \$80 on October 1, 1941, as contrasted to the indicated range of \$40 - \$150 in October, 1942. The prevailing wage was \$50 - \$70 a year ago. The average monthly wage for dairy hands increased nearly 50 percent during the 12 - month period preceding October 1942. The increase in average wage rate for general farm hands was about 36 percent for the same period.

United States Employment Service offices and county agricultural leaders reported up to \$30 more cash wages per month being paid for married dairy workers over single persons.

Single dairy workers are customarily furnished board and room and married workers are usually supplied with separate houses, fuel, milk, and garden spaces. It was generally reported by county agricultural leaders that the farm operator is conscious of the costs of these perquisites, but that in many cases the hired worker does not recognize their monetary worth in appraising wage difference between dairy and industrial jobs.

The operator's estimate of the monthly value of perquisites plus cash monthly wages for dairy hands on the 72 sample farms ranged from \$67 - \$200. This "real wage" averaged \$101, \$118, and \$111 on small, medium, and large-sized dairy herd farms, respectively. These generally comparable averages of cash wages and value of perquisites by size of herd farms contrast with the greater differences in average cash wages by the size grouping. This indicates that the smaller and medium-sized operators furnished more perquisites or may also have tended to place higher values on perquisites than in the case of the larger operators. In general, the value of perquisites in October 1942 was somewhat higher than a year previous. Board and room was generally given as \$28 to \$30 in 1941 and as \$30 to \$40 in 1942, depending on whether laundry and working clothes were furnished also. The value of houses varied from \$8 to \$35 a month, depending on size of house, alternative rental opportunities, and character of modern conveniences. Some operators furnished fuel valued at \$3 to \$8 per month. The value of milk, eggs, and meat (usually poultry and 1 hog per year) furnished the worker varied from \$2.50 to \$10 a month, depending upon the size of the worker's family and the kind of products grown on the farm. Generally, married workers were given spaces for a garden; and some were allowed to keep hogs, chickens, or cattle of their own.

Wage Rates for General Farm Workers:

The monthly cash wages of general farm hands on the 72 surveyed farms ranged from \$20 - \$120 as of October 1, 1942, with an average of \$61. The prevailing wage rate was \$60 - \$75 for the entire group of surveyed farms. As indicated in table 1, this prevailing wage range was principally established by the larger herd operators with the small-and medium-herd farmers generally paying under \$60 and concentrating in the \$40 - \$60 range.

[Data obtained from the Bureau of Agricultural Economics, indicate the general increase in average farm wage rates in the Kansas City area during the last year (table 14).]

Information on cash wages for general farm workers and the value of farm labor perquisites was obtained from a group meeting of all the farm families in a representative rural school district in Bates County, Mo. for a study being made by Missouri Agricultural Experiment Station and Extension Service. The group arrived at the following estimates:

<u>Year</u>	:	<u>Monthly cash wage</u>	<u>Value of perquisites</u>
1941	:	\$39	\$20
1942	:	55	25
1943	:	57	27

Other Wage Rates in Competition With Dairy Worker Wages:

War Project Work: - The considerable concentration of war-project activity in the Kansas City area creates heavy competition for manpower. One large plant in the area has paid 90 ¢ an hour for common labor for construction work with time and one-half for overtime, according to the district USES manager. The workers can put in about 70 hours per week which at 90¢ for regular 40 hours and \$1.35 for overtime of 30 hours would make a total cash income of \$76 a week.

A beginning wage rate of 60¢ an hour for unskilled labor prevails for all war-construction work in the area, according to the USES. Seventy hours of work per week is usual for these unskilled workers with wage increases up to 70¢ an hour.

Workers employed for production purposes in war plants of the Kansas City area are paid 67¢ an hour for a beginning wage. Production workers generally work 48 hours a week which provides a time and one-half rate for time over 40 hours. Maintenance workers at one large war plant are reported to earn from \$1.20 to \$1.50 an hour. This rate will in all likelihood induce some of the construction workers to stay in the area and accept production jobs.

Other Industry: - The prevailing wage rate in Kansas City for unskilled workers in consumer industrial work is about 35 - 45 cents an hour. Very little overtime pay is available. General estimates of changes in wage rates in civilian industry and trade indicated increases of 10 - 25 percent during the last year.

Other Dairy areas: - Information from the United States Employment Service State office in Kansas shows a prevailing monthly cash wage for dairy hands of \$50 - \$60 in Bourbon and Miami Counties; \$70 - \$100 in the Wichita area; and about \$70 in the Salina area.

II. DAIRY FARM LABOR FORCE

The labor supply in the Kansas City milkshed has been heavily drawn upon by the extensive war-project activity in the area as well as by the military service. This increased demand for men has attracted many of the usual farm laborers including the workers on dairy farms.

The farm labor demand in terms of number of milk cows on the 72 surveyed farms was stepped up very slightly from 1941 to 1942. There were 2,283 milk cows in 1941 and 2,303 in 1942 on these farms with 37 farms having no changes in numbers of milk cows, 20 farms having increases, and 15 farms having decreases.

There was a decrease of 9.1 percent in the total labor force on the 72 surveyed farms during the last year (table 3). All size of herd farms shared in this decrease. Only a small increase (5.4 percent) in family labor force took place as a partial replacement to the considerable loss of hired workers during the year. The farm family workers increased from about one-half (49.7 percent) of the total labor force in 1941 to considerably over half (57.6 percent) in 1942.

Table 3.-- Farm labor force on 72 dairy farms by type of labor and size of dairy herd, October 1, 1941 and October 1, 1942

Type of Labor	All farms				8 - 15		16 - 30		31 - 45		46 cows and over	
	Increase				cow farms		cow farms		cow farms		cow farms	
	Oct 1: 1941	Oct 1: 1942	No.	Pct.	Oct 1: 1941	Oct 1: 1942	Oct 1: 1941	Oct 1: 1942	Oct 1: 1941	Oct 1: 1942	Oct 1: 1941	Oct 1: 1942
Total labor force	296	269	-27	-9.1	65	61	117	104	54	47	60	57
Total farm family workers (including operators)	147	155	8	5.4	49	51	66	70	21	21	11	13
Hired regular labor	103	71	-32	-31.1	10	7	27	12	27	19	39	33
Hired seasonal labor	46	43	-3	-6.5	6	3	24	22	6	7	10	11

Hired workers accounted for all of the decline in labor force with a loss of 31.1 percent in hired regular workers and a 6.5 percent decrease of hired seasonal labor. Hired regular workers were about one-third (34.8 percent) of the labor force on October 1, 1941 and went down to about one-fourth (26.4 percent) last October.

The greatest loss of hired regular workers including dairy hands occurred on the medium-sized herd farms (16 - 30 cows) with a loss of over one-half of their hired regular workers. Farms having 8 - 15 cows and 31 - 45 cows lost relatively less, nearly one-third, and farms with herds of 46 cows and over had the lowest losses, about one-seventh, of all the farm size groups.

The characteristics of the labor force on the 72 surveyed dairy farms as of October 1, 1942 are shown in table 15. Nearly three-fifths of the on-farm workers were family workers including the farm operator.

Nearly one-third of the family workers were women who were reported as helping in the farm work. Although two-hired women had assisted in farm work on the surveyed farms during 1942, but they were not employed as of October 1. Farm women accounted for about one-sixth of the total farm labor force. It should be noted that the number of persons doing farm work, that is, the farm labor force, included persons who did not give full time to farm work. This qualification particularly applied to farm women as they generally did farm work only a part of the time. However, their contribution to the labor force is significant.

About 40 percent of the total male labor force was 45 years of age and over based on the total number of males for which age was reported.

Most of the 72 farmers interviewed were from 45 to 59 years of age with an average of 49 years (table 16). About one-fifth of all farmers were 60 years old and over.

The farm labor force by type of labor on the surveyed farms indicates pronounced differences by size of dairy herds. The most common force on the farms with 8 - 15 cows is the farm operator, unpaid family labor; and some seasonal workers (table 17). One-third of the farmers with herds of 16 - 30 cows employed regular and seasonal workers and considerably more than half used either seasonal or regular workers or both. All but one of the farms with more than 30 cows had regular or year-round hired workers. The regular workers usually do general farm work on small-herd farms whereas the family labor does the dairy work.

There were decreases both in number of farms hiring regular labor during the last year and in the total number of regular workers employed. As of October 1, 56 percent of the surveyed farms had regular labor employed in 1941 and 47 percent of the farms had such labor in 1942. Any decrease in number of regular workers on medium-herd farms makes it difficult to spread remaining labor sufficiently. The small-herd farmer usually depends on family labor for dairy work and does not ordinarily rely upon regular hired workers. The large-herd farmer has a greater flexibility as more workers are employed on each farm and the loss of a regular worker on such a farm can often be absorbed by extending the efforts of the labor force remaining.

Impacts of War Projects and Military Service on Dairy Farm Labor Force

Demand for labor has greatly increased in the Kansas City area during the last 9 months, with the mushrooming of war-plant construction jobs and war-production work. It is locally estimated that all farmers in the immediate vicinity are within 15 miles of a major defense project. Seven war plants in the area are employing large numbers of workers.

The heavy demand for labor in the war plants is drawing on all sources of local labor supply and is intensifying the demand for farm and civilian industrial workers. The USES reports a high rate of placement with about 70 - 80 percent of all referred workers being placed. "The employers will take pretty nearly any Tom, Mary, or Harry now" is the current expression in Kansas City.

Estimates from the Bureau of the Census show an increase in total population of 1.2 percent from 1940 to May 1, 1942 for Jackson County, Mo. and Wyandotte and Johnson Counties, Kan. A large increase in the number of war-project workers since last May 1, has probably further increased the population, particularly in some of the outlying counties, including Douglas and Leavenworth Counties, Kan. and Cass and Clay Counties, Mo. No satisfactory estimates of the number of men in the armed forces in the Kansas City area were obtained locally.

Estimates obtained in Kansas City indicate a need for 70,000 more workers during the next year from the Kansas City milkshed area. This number includes estimated calls for military service and workers for war plants in the immediate area. The USES estimates that this demand can be met within the area by the use of women on war-production jobs, through improved utilization of available workers, and through transfer of workers from civilian jobs in Kansas City. The University of Kansas is now engaged in a survey of potential women workers in the Lawrence area who would accept war-production work. Returns from 4,000 women in urban, village, and farm residence reports that about 40 percent are willing to accept such work in the area.

The USES and other agencies contacted agreed that there was heavy employment of farm people in war-construction jobs in the Kansas City area. No analyses of plant force were available as to former residence or former employment of workers in the local plants. However, an analysis of a war plant in the Parsons area in southeastern Kansas showed that about 75 to 80 percent of the construction workers were from farms. It was informally estimated by the USES that the proportion might run nearly that high for construction work in the Kansas City area.

The employment of many farm operators in war-construction was generally reported along with that of the other family members and hired farm help. The greater share of construction at the Eudora plant came after 1942 field crops were harvested. This attracted usual farm workers, including many operators, to war-plant work. There were several reports of farmers driving 40 miles to and from the plant each day. The other family members are doing most of the chores on these farms.

The USES representative in charge of farm-placement work in most of the Kansas City milkshed reported as of November 15, 1942; "Several new war industries moving into this area have inflamed the imagination of the farmers with reports of high wages, pleasant working conditions, and the secrecy of their operations. The farm labor shortage in the area involves three things in combination: (1) Wages paid by industrial firms in this area; (2) Selective Service drain of labor; and (3) Current going rates paid to farm hands."

There were indications of considerable differences by counties as to the comparative effect of war-project and military-service calls on the farm manpower situation. The pull of war projects is most apparent where war-project sites are in or adjacent to the county. The consensus was that this was generally true for the entire area. Some reports of heavy calls for military service were made which resulted in cuts in farm production. There appeared to be a relationship between such reports and the local belief that some draft boards were pressing for filling of quotas without enough allowance for maintaining essential agricultural production.

Information obtained from a survey of farm manpower changes in Bates County, Mo. shows a high proportion of the manpower loss going to military service (table 18). Bates County is on the fringe of the Kansas City area and the pull to war work is probably less in that territory. It is likely, however, that a considerable number of the men or boys leaving for "other employment" were going to some type of war work.

The bearing of the recent Selective Service amendment 2/ for deferment of essential farm workers on the 72 dairy farms included in this survey was examined (table 19). Only two of the 72 farms have fewer than 16 War Units. Table 20 shows the survey farms by number of war units per farm and the number of male workers on the farm as of October 1, 1942. On the basis of 16 War Units per male worker qualifying for occupational deferment, there were 9, or one-eighth of all 72 farms, which were overstaffed. It should be noted that a worker's efforts need not be confined to any one farm for qualifying as an "essential farm worker." On 4 of the 9 overstaffed farms, one or more workers did work on other farms which may bring his contribution up to the recommended standard. Five farms did not have the 16 War Units per essential worker qualification and did not report workers helping on other farms. On 3 of these 5 farms, a worker is vulnerable to induction on the basis of age.

A tabulation was made of male family workers and hired regular workers on the survey farms who were 18 - 37 years of age last October, and therefore vulnerable to military induction on the basis of age under the recently revised regulations. Nearly two-thirds (63 percent) of the hired male regular workers and almost one-third (29 percent) of the total male family workers came within the 18 - 37 age limit. It is apparent that the amendments to the Selective Service Act providing for deferment of essential farm workers have a direct bearing on the existing farm labor shortage on these dairy farms.

2/ Selective Service Local Board Release No. 168 effective November 30, 1942.

Labor Turn-over

Some 84 regular workers were hired on the surveyed farms during 1942. This is about one-third more than the number of such workers employed on October 1, 1942 (table 4). It indicates that the rate of turn-over was the equivalent to each of the workers employed at the first of the year leaving his job for another job and about one-third of the replacements also leaving their jobs. The rate of turn-over is greatest on the medium-sized farms and less on the larger farms. As indicated before, very few of the small-herd farms hired regular workers.

Table 4.- Rate of turn-over of hired regular workers during 1942

Size of herd	Number of hired regular workers October 1, 1942	Number of regular workers hired		Ratio number of regular workers hired during 1942 to number working October 1, 1942
		Jan 1 - Nov 20 1942	Adjusted for Jan 1 - Dec 31 1942	
8 - 15	7	5	5	0.7
16 - 30	12	25	28	2.3
31 - 45	19	22	25	1.3
46 & over	26	23	26	1.0
All farms ^{1/}	64	75	84	1.3

^{1/} The schedule for one operator having 46 cows or over was incomplete and was omitted.

^{2/} The data for January 1 - November 20 were projected on the assumption that the same rate continued for November 20 - December 31.

Farmers with dairy herds are faced with the hiring of less experienced help for their work. As one informant stated, "local dairy men, especially, are rather choosy in selecting their help." This attitude is changing and many farmers are employing workers with little if any experience in dairy work. The farmer still is reluctant to take men who aren't farm experienced.

Complaints about losses of experienced dairy and general farm hands were equalled if not surpassed by the complaints of heavy turn-over of workers disturbing farm production. The uncertainty as to when the regular hands might quit was also stressed as a strain on those farmers who are operating an enterprise requiring continuously adequate alteration.

Some pirating of dairy hands was reported, although no very serious situation has developed. Farmers generally dismissed such action by saying they didn't blame the worker if he could get more wages on another farm. However, the farmers were not nearly so tolerant of the attraction of war-projects with their higher wage rates.

Over one-third of the regular hired workers coming to work on the 72 surveyed farms in 1942 came from other farms in the locality, about one-third came from farms outside the locality, and over one-fourth from nonfarm work (table 21). Only one-seventh of all regular workers came from other dairy farms in the locality.

About one-half of the regular hired workers leaving the sample farms in 1942 went to nonfarm employment. About two-third of these or nearly one-third of all workers leaving farms went to war-project work (table 22). About one-fifth of all workers leaving went to the armed forces.

The considerable labor turn-over as well as shortage of help creates a high degree of uncertainty in the farmer's thinking as to his labor supply. This uncertainty was expressed very generally by the farm operators and is apparently a major factor in their plans for milk-production.

Utilization of Labor

The farm operator and other family workers did 61 percent of the man-months of work on the 72 surveyed farms in 1942; hired regular workers did 35 percent, and hired seasonal workers did only 4 percent of the total man-months of work (table 23). Family workers, as would be expected, play a more predominant part on small-and medium-sized herd farms. The regular hired worker did 60 percent of the man-months of work on the farms having 46 cows and over.

There was every evidence of a fuller utilization of the usual farm labor force in the Kansas City area. Both family and hired labor were working harder and putting in longer hours according to reports from agricultural leaders and information obtained from farmers. The pressure on hired workers to put in long hours to get the job done was cited as a major factor in encouraging some of them to quit farm work and go into other employment, particularly at war-projects.

Practically all of the farm operators reported putting in full time at farm work both in October 1941 and in October 1942. However, their effort was intensified as measured by increased hours of work during the last year. This is particularly significant among dairy farmers who customarily put in long and steady hours of work. These operators worked an average of 11.9 hours a day in October 1941. An increase of 1.1 hours per day was reported for October 1942. This lengthening of the work day is placing a heavy load on these operators. Several farmers reported that their additional hours, plus help received from their wives, has enabled them to continue operating despite loss of regular hired workers.

It was stated by some agricultural leaders that the labor situation for dairy work became tight last May and June. The first response of farm operators was to work harder with the available farm labor force and then to have the farm women assist in some of the lighter dairy work such as in the milkhouse. Some wives of married farm hands are employed in milkhouse work. The farmers are generally against the employment of nonfarm women in any farm work and particularly for dairy jobs.

Farmers with dairy cows generally are expecting to employ more inexperienced dairy hands. Many of them have already done so.

The fuller utilization of any underemployed farm operators or family workers was discussed informally with several farmers. There are some "5 acre" farms and village families in the Kansas City area. The general farmer opinion was against the moving of these underemployed to more adequate units which may be vacated through auction sales in the locality. The inability of these smaller or subsistence operators to manage the larger units was the principal objection. Many of the farmers were favorable to intensifying agricultural production on these small units by adding another cow or two. Some interest, but little intention, was expressed for part-time employment of underemployed farm and village families in dairy work on larger neighboring farms.

Recruitment of Labor

The USES maintains a local office in Kansas City, Mo. which serves six counties on the Missouri side and also Wyandotte and Johnson Counties in Kansas. Other local USES offices at Lawrence and Leavenworth, Kan. serve Kansas counties in the milkshed. Each of these local offices is now staffed with one person who gives full time to farm-placement work. These local USES offices are also supplemented with volunteer farm-placement representatives in most of the rural communities. Several farmers interviewed in the survey stated they had used Farm Placement Service. This use of the placement service showed up particularly strong in one USES district where the farm-placement representative has served several years and has given a great deal of attention to meeting with farm people on the labor problems. These personal contacts were reported as helpful in acquainting the farmer with the Farm Placement Service and encouraging its use by the farmers.

A few private employment agencies in Kansas City emphasize farm labor recruitment.

Advertising in the newspaper for hired help is a common practice among the dairy farmers in the Kansas City area. These advertisements are generally run in the local papers but some operators advertise in rural newspapers located in outlying areas.

A few dairy operators, usually larger ones, supplement their advertising with personal recruitment in outlying rural areas.

Considerable interest was expressed by several dairy operators in a combined recruitment and training program for dairy workers. It was reported that such a program should be carried out with aid of public support partly because there would be need to transport such new workers in from outside the milkshed area.

III. CHANGES IN FARMERS' INCOME - SIZE - TYPE

Farmers' Ability to Pay Wages

Summaries of typical ^{3/} budgets for small, medium, and large dairy farms are given in tables 5, 6 and 7. Net cash income represents the amount of money available to pay for depreciation on buildings and equipment, interest on operator's investment, and for labor of the farmer and his family. By inspecting the net cash income for the different budgets and deducting reasonable rates for interest it can readily be seen that the return to the operator for his labor and management was less than the wages of a good dairy hand in either 1941 or 1942. After balancing expected income and expenses for 1943, it is also evident that the operator would have left about the wages of a hired hand for that year.

Shifts in Organization in Comparison to Alternative Enterprises and to Relieve Labor Shortage

An analysis of seven farm plans developed by farmer groups, representing small, medium, and large dairy farms in the Kansas City milkshed, indicates minor changes in crop organization from 1941 to 1942. There was a slight tendency to increase feed grains and decrease roughages on those farms with smaller acreages of cropland.

Increases were indicated in numbers of milk cows, hogs raised, and chickens in 1942. Increases in cow numbers were more significant in the fringe of the milkshed, showing from 10- to 15-percent increase on small and medium herds of 20 cows and less, and about 15- to 17-percent on the large farms with 20 cows and more. Changes in numbers of hogs and chickens were similar on farms in the intensive dairy area and the fringe and amounted to 1 to 2 sows per farm and a 20- to 25-percent increase in number of chickens.

Changes anticipated for 1943 indicate a general trend toward still greater intensification of acreage of feed grains on smaller farms. Decreases are expected in acreages of temporary pastures and other crops, such as soybeans and flax, on all farms in the intensive dairy area. Carrying capacity of temporary pastures has been above average in recent years, which would allow for some decrease in acreage for the 1943 season. Roughages are expected to remain about the same or decrease slightly in the intensive dairy area. A different situation is anticipated in the fringe where a shift is being made from grains and roughage to pasture. This is especially true on the large farms.

- ^{3/} The following assumptions were used in developing the budgets:
- Prices - 1941 and 1942 based on actual average, about 20 percent increase in prices of whole milk expected in 1943 over 1942, some increase expected in prices of other farm products and expense items.
 - Crop Production - 1941 and 1942 based on estimated actual rates, 1943 based on estimated long-time average.
 - Livestock Production - 1941 and 1942 based on estimated actual rates, 1943 based on rates which could be expected in line with present conditions.
 - Marketing Practice - Actual for 1941 and 1942, no changes were expected in 1943.

Table 5. - Summary of budget for a 13- to 15-cow farm in the intensive dairy area of the Kansas City milkshed

Item	1941 Actual	1942 Actual	1943 Anticipated
	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>
Feed grains	56	56	57
Roughage	29	29	28
Pasture	53	53	60
Other	10	10	3
Total	148	148	148
	<u>Number</u>	<u>Number</u>	<u>Number</u>
Milk cows	15	13	14
Hogs produced	11	27	27
Hens	100	100	100
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
<u>Cash income</u>			
Crops	0	0	0
Livestock	503	1,197	1,222
Livestock products	1,308	1,909	2,511
Other	127	147	147
Total	1,938	3,253	3,880
<u>Cash operating expenses</u>			
Feed bought	191	284	300
Hired labor	107	107	107
Fuel, electricity, oil and grease	268	288	300
Machinery repairs	75	105	105
Hired power and machinery	71	100	125
Milk hauling	155	185	200
Seeds and plants	71	71	71
Cash rent and taxes	334	334	334
Current interest	82	82	82
Dairy equipment	15	15	25
Other	226	250	253
Total	1,595	1,821	1,902
Total cash income	1,938	3,253	3,880
Cash operating expense	1,595	1,821	1,902
Net cash income	343	1,432	1,978
Hired seasonal labor	107	107	107
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Percentage cash operating expense is of gross cash income	82	56	49
Percentage labor expense is of total expense	7	6	6

Table 6. - Summary of budget for an 18- to 20-cow farm in the fringe of the Kansas City milkshed

Item	1941 Actual	1942 Actual	1943 Anticipated
	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>
Food grains	125	105	105
Roughage	75	85	45
Pasture	90	100	130
Other	0	0	10
Roads and waste	10	10	10
Total	300	300	300
	<u>Number</u>	<u>Number</u>	<u>Number</u>
Milk cows	18	20	20
Pigs produced	20	30	30
Ewes	15	20	20
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Cash income			
Crops	0	0	0
Livestock	721	1,396	1,409
Livestock products	2,579	3,191	3,857
Other	450	300	300
Total	3,750	4,887	5,566
Cash operating expense			
Food bought	482	547	667
Hired labor	580	730	460
Fuel, electricity, oil and grease	250	250	250
Machinery repairs	240	300	400
Hired power and machinery	370	570	465
Milk hauling	0	0	0
Seed and plants	122	99	152
Cash rent and taxes	225	225	225
Current interest	400	400	400
Dairy equipment and supplies	0	0	0
Other	905	930	560
Total	3,574	4,051	3,579
Total cash income	3,750	4,887	5,566
Cash operating expense	3,574	4,051	3,579
Net cash income	176	836	1,987
Hired labor	580	730	460
Family labor	3 months	3 months	3 months
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Percentage cash operating expense is of cash income	95	83	64
Percentage labor expense is of total expense	16	18	13

Table 7. - Summary of budget for a 42- to 45-cow farm in the intensive dairy area of the Kansas City milkshed

Item	: 1941	: 1942	: 1943
	: Actual	: Actual	: Anticipated
	: Acres	: Acres	: Acres
Feed grains	: 57	: 64	: 67
Roughages	: 52	: 49	: 49
Pasture	: 194	: 194	: 191
Other	: 17	: 13	: 13
Total	: 320	: 320	: 320
	: Number	: Number	: Number
Milk cows	: 42	: 42	: 45
Hogs raised	: 42	: 42	: 56
Hens	: 42	: 42	: 56
	: Dollars	: Dollars	: Dollars
Cash income			
Crops	: 0	: 0	: 0
Livestock	: 2,750	: 3,675	: 4,276
Livestock products	: 15,961	: 17,547	: 20,533
Other	: 200	: 200	: 175
Total	: 18,911	: 21,422	: 24,984
Cash operating expenses			
Feed bought	: 3,260	: 3,615	: 4,080
Hired labor	: 3,409	: 4,480	: 4,950
Fuel, electricity and grease	: 1,792	: 2,000	: 2,000
Machinery repairs	: 1,600	: 1,780	: 1,980
Hired power and machinery	: 255	: 330	: 330
Milk hauling	: 171	: 171	: 184
Seeds and plants	: 190	: 230	: 230
Cash rent and taxes	: 640	: 640	: 625
Current interest	: 300	: 300	: 250
Dairy equipment and supplies	: 1,950	: 2,045	: 1,950
Other	: 2,763	: 3,223	: 3,673
Total	: 16,330	: 18,814	: 20,252
Total cash income	: 18,911	: 21,422	: 24,984
Cash operating expenses	: 16,330	: 18,814	: 20,252
Net cash income	: 2,581	: 2,608	: 4,732
Hired regular labor	: 3,109	: 4,030	: 4,500
Hired seasonal labor	: 300	: 450	: 450
	: Percent	: Percent	: Percent
Percentage operating expense is of income	: 86	: 88	: 81
Percentage labor expense is of total expense	: 18	: 21	: 20

Increases are expected in numbers of dairy cows on farms in 1943 in the intensive dairy area and on smaller farms in the fringe. However, on the larger farms in the fringe there will probably be a reduction in number of cows milked and an increase in production of beef.

In general, farmers at the meetings felt that the prices being received for whole milk were too low compared with prices for beef and pork. In the fringe, where the possibility exists, farmers are shifting to more beef cattle and hogs. In the heart of the intensive dairy area, where farms are smaller and the organizations are relatively inflexible, such a shift is not so evident.

Apparently, shifts are being made to relieve the labor shortage in both the intensive dairy area and the fringe. The adjustment in the intensive dairy section is a reduction in acreage of crops with the same or slightly larger livestock numbers. These farmers plan to buy more concentrates than formerly. This agrees with the conclusions from schedule information on this point. In the fringe the trend is toward larger acreages of pasture and more roughage-consuming livestock.

Shifts in farm practices to meet labor stringency

Farmers are adopting various ways and means of meeting the shortage of labor. It is a common practice to work from 2 to 3 hours longer each day. More of the lighter farm tasks are being done by children 12 to 15 years of age and neighbors are exchanging work to a greater degree. More of the labor-consuming operations are contracted with custom machines. Greater use of milking machines is in evidence in all sections of the milkshed. The shift to roughage-consuming livestock and pasture mentioned above, is also a means of meeting the labor situation as is the expected practice of purchasing more concentrates in place of growing them on the farm.

In addition to the practices mentioned above, there is also a tendency to neglect the crops where least damage will be done. Farmers pointed out that corn had not been given the usual number of cultivations and that some hay had not been harvested which ordinarily would have been if labor had been more plentiful.

IV. MILK SUPPLY AND DEMAND SITUATION

Kansas City, Mo., normally a surplus market, has been unable to obtain enough fluid milk from qualified shippers to cover the fluid needs of its consumers for the first time since the drought of 1934. This has been the result of a greatly increased demand due to a large influx of war-plant workers, an increased purchasing power due to fuller employment and higher wages, and a curtailment of fluid milk production since August 1942.

Demand for fluid milk and cream has been increasing steadily, not only in Kansas City, but also in adjoining areas where construction of war plants and service bases has increased the population tremendously. Some communities that formerly numbered their population in the hundreds now have thousands of consumers.

In addition to population changes, consumer incomes have increased considerably in the Kansas City area. Department store sales of October 1942 were about 40 percent higher than a year earlier, and bank debits were up even more (table 24). Good business conditions and tire conservation are also indicated by an increase of 34 percent in transit company receipts for the same period.

A good share of this change in Kansas City business has come because the city is the metropolitan center for surrounding rural areas that now are booming with war-plant construction. Outstanding among these war plants are an ordnance plant employing at the peak some 23,000 workers; an air base, 2,400; another ordnance plant, 6,500; and an airplane engine plant, 6,000. ^{4/} Many of these workers were recruited in the area, but thousands were imported. This labor demand also succeeded in increasing average wages for regular occupations, so that consumer income was boosted far more than the population (see discussion of area wage rates).

As a result of an increase in population and of consumer incomes the sales of milk in the Greater Kansas City Marketing Area have increased tremendously. Class I plant sales in October 1942 were reported at 42 percent over October 1941, and Class II sales for the same periods were up 35 percent. ^{5/}

For the first 8 months of 1942 increased production of milk was sufficient to meet increased consumption and demand. In September and October, however, production dropped off more than the usual seasonal decline. Reported producer deliveries in October 1942 were 24 percent less than those of August 1942 compared with a 15-percent decrease in the same period in 1941.

^{4/} October 1942 report, Milk Market Administrator, Greater Kansas City Marketing Area (includes Kansas City, Mo., Kansas City, Kans., and Leavenworth, Kans.).

^{5/} Producers who retail their own production are not included in market administrator's reports, unless they buy milk from other producers.

Deliveries in October 1942 were 7 percent less than in October 1941 (table 25). To meet this deficiency, Grade C milk (from uninspected sources) was used to meet sales demand for Class II milk in September and for both Class I and II in October, as some distributors who were short of milk for fluid trade used Grade C milk for bulk fluid milk deliveries. In addition, supplies of milk were brought in from outside sources. Producer-distributor 6/ production and sales were reduced slightly during the year so that the market as a whole faces a 35-to 40-percent increase in fluid sales with about 8 percent less fluid milk from customary inspected sources.

Changes in Supply - Producer Problems

The Kansas City market is supplied by two types of producers - the "producer-distributor" who retails his own milk produced on farms close to the city and the "can-shipper" whose milk is routed to the city through one of the dozen large distributors that handle a major part of the city's supply.

Producer-distributor. - In recent years, producer-distributors have steadily decreased in importance in the market, although they still deliver about 18 percent of the fluid milk. During the last 5 years, the number of producer-distributors has been reduced from about 250 to 71. Until the last year, both sanitation and financial reasons were commonly given for quitting. Since November 1941, when there were 102 producer-distributors, only one has been forced out by health regulations. In other words in the last year, 30 left because of economic advantages or disadvantages. 7/ Of these, 7 sold their routes and started selling to dealers; 12 sell through milk stands, largely to war workers; and 11 sold out entirely. Some of the remaining producer-distributors have added cows, and many have increased production per cow. High-cost routes and poor customers have been abandoned as mileage economies were affected. Thus, about 30 percent fewer producer-distributors now handle 24 percent fewer cows, and distribute 10 percent less milk (table 8).

Reasons for quitting ordinarily reported are divided about 50-50 between difficulties in obtaining adequate help and inability to cover increasing costs under present price ceilings. War-plant construction, competing for labor, evidently accelerated the trend out of distribution by these producers, for 12 of them left in the 7 months between November 1941 and June 1942, and 18 have left in the 5 months since then. Wages paid by the larger producer-distributors have increased considerably with present averages around \$100 with board, as compared with about \$60 with board a year ago. Range of wages paid is unusually wide, with some still paying around \$50 and others up to \$125 for milkers and barn hands. 8/ The quality of help in general has deteriorated and the turn-over has increased tremendously. Some larger

6/ Producers who retail their own production are not included in market administrator's reports, unless they buy milk from other producers.

7/ Reports of milk inspectors, Kansas City Department of Sanitation.

8/ Estimates of O. C. Murphy, Manager of Independent Dairies (producer-distributors).

Table 8.--Changes in number of producer-distributors, dairy cows, delivery routes, average and total units delivered in Kansas City, Missouri, marketing area,^{1/} by specified periods

Item	November 1941	November 1942	Percentage change
	<u>Number</u>	<u>Number</u>	<u>Percent</u>
Producer-distributors	102	71	-30
Dairy cows	4,838	3,661	-24
Delivery routes	130	97	-25
Average units delivered ^{2/}	250	300	$\frac{1}{4}$ 20
Total units delivered ^{2/}	32,500	29,100	-10

^{1/} Includes Kansas City, Mo., only.

^{2/} On basis of continued daily deliveries.

Source: Department of Sanitation, and Independent Dairies, Kansas City, Mo.

operators report extremely high turn-over in regular hands, and indicate that their farms are just way stations between isolated rural areas and war-plant jobs in the marketing area.

Costs of feed and prices of cows have also risen during the last year (table 26). Mixed dairy rations at wholesale rates are from 10 to 15 percent above 1941, and prices of cows are up from 20 to 50 percent, depending on type of cow and stage of lactation as reported by the Bureau of Agricultural Economics. Slaughter prices make an effective floor under cow prices.

These increasing costs have squeezed the producer-distributor against ceiling prices (13 cents off the wagon, 10 cents from store). A decreased operating margin plus the many advantages of either getting out of business or selling milk to dealers have persuaded many that now is a good time to sell out. Larger dealers are bidding for retail routes, other producers are bidding strongly for cows, and land costs are relatively high. Individuals with heavy debt loads believe they can sell out at an advantage, get good war jobs, and probably return after the war at an advantageous buying-in time.

Wholesale producers. - The can-shipper has not been squeezed so badly as the producer-distributor, because dealers are paying can shippers on a blended, formula price that has been rising steadily as (1) condensery prices have risen, and (2) as a larger percentage of milk has been disposed of in higher uses. The market pool price in October was \$2.86 (3.8 percent milk) compared with \$2.42 in October 1941, and \$2.46 in June of 1942 (table 27).

In spite of the increase in price, many Grade A shippers in the general farming areas around the shed have evidently decided that production of milk is not profitable. The administrator's office reports the loss of 207 producers during the year with a pick-up of 135, a net deficit of 72 in the nearly 1,500 producers included in the Greater Kansas City Marketing Area.

No material change in size of deliveries is indicated in a sample analysis of new and quitting producers (table 9). The general market average of daily producer deliveries is down slightly, and would have fallen further had not the smaller number of producers (table 10) in 1942 been able to increase their average deliveries over 1941.

The can-shipping producers as a group use less regular hired labor than the producer-distributors, not only because there are proportionately more family-sized operators among them but also because they do not pasteurize, bottle, and deliver their milk. This, plus the fact that feed prices have increased relatively less than milk prices (table 28) should have tended to maintain whole milk production among this group. However, other factors have worked against this tendency.

Chief among these has been the competition of other farm enterprises for the time and resources of the general farm operator and the high wages that the operator himself can get at war-plant work. On the basis of crop-estimate reports for two Kansas districts of the milkshed, the October 1942 prices of hogs

Table 9.--Distribution of quitting and new producers^{1/} by average daily deliveries to Greater Kansas City marketing area,^{2/}
October 1941, and October 1942

Average daily deliveries	:	Quitting	:	New
<u>Pounds</u>	:	<u>Number</u>	:	<u>Number</u>
Under 85	:	3	:	5
85-169	:	20	:	17
170-254	:	7	:	9
255-339	:	4	:	2
340-424	:	0	:	1
425-509	:	1	:	0
510-594	:	0	:	0
595-679	:	0	:	0
680-764	:	0	:	0
765 and over	:	2	:	0
Total	:	37	:	34

^{1/} New producer defined as one reported in October 1942, but not in October 1941; quitting producer reported in October 1941, but not in October 1942. This frequency compares about one-third of the producers involved in shifts although fewer than average quitting producers are reported in this instance.

^{2/} Includes Kansas City, Mo., Kansas City and Leavenworth, Kans.

Source: Federal Milk Market Administrator, Kansas City, Mo.

Table 10.--Average number of producers shipping fluid milk
to Kansas City marketing area^{1/} by years, 1935-40,
by months, 1941-42

Period	:	Producers
		Number
1935	:	1,269
1936	:	1,326
1937	:	1,419
1938	:	1,476
1939	:	1,327
1940	:	1,252
1941	:	
January	:	1,202
February	:	1,200
March	:	1,211
April	:	1,196
May	:	1,191
June	:	1,187
July	:	1,190
August	:	1,179
September	:	1,169
October	:	1,171
November	:	1,155
December	:	1,151
Average	:	1,184
1942	:	
January	:	1,144
February	:	1,142
March	:	1,134
April	:	1,111
May	:	1,116
June	:	1,115
July	:	1,115
August	:	1,118
September	:	1,100
October	:	1,096

^{1/} Includes Kansas City, Mo. Approximately 300 more producers were included in the Administrator's report for Greater Kansas City area in October 1942.

Source: Federal Milk Market Administrator, Kansas City, Mo.

were 39 and 37 percent higher than 1941, beef cattle 28 and 17 percent higher, lambs 19 and 24, butterfat 33 and 31, blend prices for wholesale graded milk announced by the administrator were 18 percent higher in 1942, whereas milk sold retail by producer-distributors in smaller towns of the milkshed was only 2 and 3 percent higher. 9/ A hog and cream combination has caught the fancy of many operators, and they have increased their hog enterprise rather than dairy. The average number of cows per farm (dry and milking) of 68 fluid milk producers surveyed were 34 for both 1941 and 1942 with an estimated 36 head in 1943. Average hog numbers per farm were 32 in 1941, 41 in 1942, and 49 for 1943. Increased reliance on pasture for livestock enterprises such as beef and sheep has eased the labor problem on some farms. However, there have been no major adjustments in cropping practices.

Small operators have in some cases paid less or no attention to farming in order to work at war-plant construction. Except for Bates County, Mo., there is "said to be" a war job within 15 miles of every dairy farm in the milkshed. Wages from \$40 to \$110 a week are sufficiently attractive to get many small farmers who can commute to work. Chores can be done before and after work, although much of the farm work often falls to other members of the family.

Selective service inroads. - Generally, production of milk is less affected by the draft than by competitive jobs or enterprises (see labor supply discussion). The exception is the family farms (father and son) which must cut production or hire regular labor when the adult son is inducted or enlists. Recent changes in draft policy allowing deferment of essential workers is expected to slow or halt the harmful effects of Selective Service.

Disposal of Cows Sold

Although no figures could be obtained to prove it, dairy interests generally believe that an exceptional number of good dairy cows are going to slaughter, and that many more herds than usual are being broken up.

Interviews with informed men of the Kansas City Stockyards obtained opinions ranging from "no material change in slaughter or dairy cows" to "25 percent increase." At the same time, the largest dealer in dairy cattle in the yards reported the best market for good dairy cows in many years, sales at least equal to 1941, and an actual difficulty in finding good cows (springers or bred heifers) to sell to dairy farmers.

An analysis of advertisements for sales of dairy cows and heifers in the Kansas City Star tends to support the opinion that dispersals are only slightly greater than in 1941. Auction sales using only handbills were "reported to be" more numerous, but no formal data were available on such sales. A comparison of weekly offers to sell or dairy cattle auctions for 6 weeks (October 1 - November 15) in both years showed that in the 1942 period, there were 2,059 cows

9/ Kansas State Agricultural Statistician.

involved in sales in the States of Kansas and Missouri, only 6 percent more than in 1941. Although 35 percent more individual advertisements were listed, there was a 55-percent increase in the number of single-cow offerings.

If it is assumed that the Kansas City area has a larger than usual proportion of these sales, it is probable that dry cows and culls in the area are going to slaughter, with an increase, of about 15 percent over normal culling, taking place. This is not unexpected in view of the light culling reported in recent years. Although this means that average production per cow may be higher, it also reduces the total quantity of milk that can be produced in the shed. Immediately, this situation is made worse by the loss of production from the shifted cow. Also, the cows are going to smaller operators where care and feeding is generally less likely to get the best from the cows.

This rather confused picture of what is happening to dairy cows sold is cleared a little bit by an analysis of producer deliveries by size groups (table 11). This distribution comparing October 1941, with October 1942, indicates that smaller producers, most of them within a family-size, have been increasing in numbers whereas the larger groups have decreased. Evidently, most of the cows sold are being picked up by smaller operators, although some of the larger operators have also added cows to their herds. The large number of small producers (table 29) also offers a possibility for developing a specific program of halting dairy cow slaughter by moving cows to small units. An alternative would be to encourage small units to abandon production and move to larger units as laborers for the duration.

Distribution Problems - Market Price¹

The larger distributors of the market are caught in much the same squeeze as that reported for producer-distributors, with the difference that "out of distribution" would mean out of business. The extent to which reduced dealer margins mean net losses, however, can only be determined by a specific audit (beyond the controls of this survey). Some financial changes are more obvious.

The average cost of milk to dealers is higher than the average cost a year ago. The price of October 1941, for Class I (fluid milk) was \$2.55 cwt. of 3.8 milk. In October 1942, it was \$2.81 (10 percent higher). Class II has risen 11 percent from \$2.30 to \$2.56. Class III or byproduct uses 19 percent from \$1.93 to \$2.30. ^{10/} (table 27). At the same time, the wages paid route and plant men have risen from 15-20 percent, also, rapid turn-over of workers (conservatively estimated at 35 percent for route men, not counting trainees, and 70 percent in plant) has decreased the efficiency of the labor force. ^{11/}

The shortage of graded milk has also tended to increase cost of operation,

^{10/} Class prices refer to specific uses of milk such as fluid milk, fluid cream, soft cheeses, and other byproducts. The market blend price is a weighted average of these prices times the quantities used in the various classes.

^{11/} Estimates of Country Club Dairy.

Table 11.--Distribution of producers by average daily deliveries to Kansas City Market in October 1941 and 1942^{1/}

Average daily deliveries	:	Number of producers			Change 1941 - 1942
		October 1941	:	October 1942	
<u>Pounds</u>	:				
<u>Small</u>	:				
0- 84	:	86		98	+ 12
85-169	:	396		403	+ 7
170-254	:	247		249	+ 2
Total ^{2/}	:	729		750	+ 21
<u>Medium</u>	:				
255-339	:	153		141	-12
340-424	:	77		67	-10
425-509	:	31		40	+ 9
Total ^{2/}	:	261		248	-13
<u>Large</u>	:				
510-594	:	13		14	+ 1
595-679	:	10		5	-5
680-764	:	5		2	-3
765 and over	:	8		7	-1
Total ^{2/}	:	36		28	-8
Grand total	:	1,026		1,026	

^{1/} Includes only producers reporting to milk market administrator in both periods. This does not include approximately 70 producer-distributors who do not report under the order.

^{2/} Subtotals group producers according to an assumed relationship between production and size of herd in groups of 1-15, 16-30, 31 and over.

Source: Federal Milk Market Administrator, Kansas City, Mo.

because dealers have been forced to new sources of Grade C milk at manufacturing plants where dealers have bid against each other for skim milk to thin out excess butterfat from Grade A milk and for whole milk for all uses, although largely Class III until recent weeks.

Some of this increased cost has been offset by the increases in efficiency resulting from the larger volume of sales and the compliance with Office of Defense Transportation regulations. Route men, who operate partly on commission, now average about 50 units more and travel from 30-50 percent fewer miles per route. Overhead costs of supervision, accounting, management, and plant operation should be reduced considerably with the increase in volume. Individual plant figures are not available, but Class I and II sales in October 1942 among Kansas City, Mo. dealers were up 27 percent over October 1941 (not including differential fat). ^{12/} Store sales have proportionately increased, although this is considered a mixed blessing by dealers who believe the 10 cent to-the-store price for fluid milk is far too low compared with a 13-cent wagon price.

Some dealers are paying premiums to producers for milk delivered in excess of base milk. These premiums add to "losses" but are considered good business as they may aid in keeping customers satisfied. Some dealers have also bought out producer-distributor routes, thus again adding to their losses. However, some of these operations have been undertaken with an implicit assumption that the Office of Price Administration will allow an increase of 2 or 3 cents on quarts, with other items raised in proportion.

The entire market is imbued with the justice of "necessary" increases. In fact, the reduction in production this fall may be the result of a producer disappointment over not having received an increase expected in August (hearing on price increase held in August 1942). Producers and distributors argue with some justice that their prices have not risen with costs; that producer alternatives in hogs, poultry, cattle, and off-farm employment are much more attractive than milk; that an unfortunately timed price war in February knocked milk off a 14-cent market; that 16 cents is necessary to meet costs and renew producer incentive to production; that present prices will not allow wage competition with war industries; and that a properly inspected milk supply cannot be obtained at present prices.

In terms of prices of other foods, many of which have risen considerably during the last year, milk is (as it has always been) relatively inexpensive. It is doubtful whether consumers in the area would object to a price increase of 1 or 2 cents; however, if an increase is granted, the two-price system for providing milk to disadvantaged consumers should be invoked. A 15-cent market would be somewhat out of line with customary differentials among secondary markets in the shed, and would force some readjustments in a few towns where milk still sells at depression prices. These secondary markets, too, need some incentive to maintain production of fluid milk.

^{12/} Report of Kansas City Milk Market Administrator, October 1942.

At present, an amendment to the Federal Order in the market is being considered. It contains a provision that would give producers approximately 32 cents more per hundredweight of Class I milk. Adoption of this amendment and a 1-cent break in ceiling prices would encourage many doubtful producers to stay in the market and would ease the squeeze on dealer margins.

A 2-cent break in the ceiling price would allow a still greater increase in producer prices and might succeed in increasing milk production among producer-distributors who retail their milk.

It is possible that a 1-cent break would maintain present production, and, with usual seasonal increases would take care of the market until after the spring flush. Unless farmers can be assured of adequate labor for field work next year at reasonable cost, an additional stimulus in price may be necessary to hold production in late 1943 in line with anticipated increases in demand (See wage-rate discussion).

More Grade C milk could be shifted to the market, but such a procedure would be a constant threat to the health of the many war workers in the area. A moderate increase in price, as a subsidy covering the costs of meeting Grade A requirements, might aid immediately in shifting nearby Grade C milk to the fluid outlets. Unrestricted use of Grade C (now being suggested as "Victory" milk) would be a tawdry gesture in a market holding such an excellent record in the production of quality milk.

Appendix

Table 12. - Array of regular workers according to cash monthly wage,
by size of herd and type of labor, Oct. 1, 1941 and Oct. 1, 1942

15 cows: or less:		16 to 30 cows		31 to 45 cows		46 cows or more	
General	Dairy	General	Foreman	Dairy	General	Dairy	General Foreman
October 1, 1941							
\$ 20	\$ 35	\$ 25	\$ 55	\$ 25	\$ 28	\$ 45	\$ 35 \$ 80
20	40	30		43	30	45	35 110
30	50	35		43	30	45	35
35	60	35		43	30	45	40
38	60	35		60	35	45	40
39	60	35		72	35	60	45
40	60	35		75	35	60	50
45		35		75	39	60	50
55		38			40	60	50
56		45			40	60	52
		45			40	60	52
		45			43	60	52
		50			45	60	52
		50			45	60	60
		50			50	60	65
		50			55	70	65
		50			56	75	75
		75			65	80	100
					80		
Ave.							
38	52	42	55	55	43	58	53 95

October 1, 1942

20	40	40	55	40	30	50	40	110
20	60	45	100	65	40	50	60	160
35	61	50		65	45	60	60	
40	100	55		65	50	70	60	
50		65		150	55	80	65	
60		65			60	90	65	
60					65	95	70	
					65	100	75	
					65	100	75	
					74	100	75	
					80	100	90	
					80	100	100	
					87	110	100	
						110	120	
						125		
Ave.								
41	65	53	78	77	61	89	75	135

Compiled from farm schedules.

Table 13. - Array of workers according to cash monthly wage, by type of labor and production zone, October 1, 1942

Dairy workers		General farm labor		Foreman	
Intensive	Fringe ^{1/}	Intensive	Fringe ^{1/}	Intensive	Fringe ^{1/}
zone 1/	:	zone 1/	:	zone 1/	:
\$61	\$40	\$20	\$20	\$100	\$55
70	50	40	35	110	
80	50	45	40	160	
90	60	45	40		
95	65	50	40		
100	65	50	40		
100	65	55	50		
100		60	50		
100		60	55		
100		60	60		
100		60	60		
110		60	60		
110		65	65		
125		65	65		
150		65	65		
		65	65		
		70			
		74			
		75			
		75			
		75			
		87			
		90			
		100			
		100			
		120			
Averages	\$ 99	\$56	\$67	\$51	\$123
					\$55

^{1/} The intensive zone includes Johnson and Douglas Counties in Kansas and Jackson County, Mo. The "fringe" counties are Jefferson and Shawnee in Kansas; Clay and Bates in Missouri.

Compiled from farm schedules.

Table 14. - Wage rates by crop reporting districts of Kansas and Missouri which are represented in Kansas City fluid milkshed

State and District	By the month with board				By the month without board				By the day with board				By the day without board			
	Jan.	April	July	Oct.	Jan.	April	July	Oct.	Jan.	April	July	Oct.	Jan.	April	July	Oct.
Kansas	Dollars															
District 3:																
1941	24.62	26.42	31.26	30.90	34.84	37.15	42.10	42.05	1.39	1.42	2.04	1.84	1.87	1.93	2.65	2.34
1942	31.44	37.06	41.12	30.90	43.35	49.88	54.50	42.05	1.92	1.91	2.65	1.84	2.37	2.50	3.23	2.34
District 6:																
1941	23.78	27.40	29.82	31.15	35.52	39.56	43.12	43.92	1.37	1.47	1.85	1.92	1.82	1.96	2.47	2.44
1942	32.56	36.90	39.86	31.15	46.30	51.06	55.43	43.92	1.86	2.02	2.34	1.92	2.51	2.63	2.93	2.44
Missouri																
District 1:																
1941	26.00	27.00	31.00	30.00	35.00	37.00	40.00	39.00	1.25	1.30	1.70	1.60	1.60	1.65	2.20	2.10
1942	31.00	37.00	41.50	43.70	41.00	45.00	50.25	56.00	1.70	1.75	2.20	2.55	2.25	2.20	2.80	3.20
District 4:																
1941	23.00	25.00	27.00	28.00	32.00	36.00	37.00	39.00	1.20	1.25	1.85	1.55	1.60	1.60	2.30	2.05
1942	28.00	36.00	37.25	42.80	39.00	46.00	50.00	55.00	1.75	1.75	2.00	2.40	2.15	2.20	2.60	3.10

Source: Bureau of Agricultural Economics

Table 15. - Number of farm workers on surveyed farms by types of workers, sex, and age groups and by size of dairy herd
October 1, 1942.

	All farms	
	No.	Percent
Total, all workers	269	100.0
Total family workers	155	57.6
Male total	155	41.6
Under 18 years	112	5.9
18-19	16	2.2
20-34	6	7.1
35-44	19	7.1
45-64	19	16.4
65 and over	44	3.0
Female total	8	16.0
Under 18	43	1.9
18-44	5	8.2
45 and over	22	5.9
Hired regular workers	16	26.4
Male total	71	00.7
Under 18	2	2.6
18-19	7	10.4
20-34	28	4.5
35-44	12	7.1
45-64	19	0.7
65 and over	2	
Hired seasonal workers		16.0
Male total	43	0.7
Under 18	2	0.4
18-19	1	1.1
20-34	3	1.5
35-44	4	1.5
45-64	4	0.4
65 and over	1	10.4
Age unknown	28	

Table 16. - Distribution of operators, by size of herd and age of operator, 1942

Size of herd <u>1/</u>	Average age	Number of operators in each age group						Total
		Under 30 years	30 to 44 years	45 to 59 years	60 years and over	Unknown		
8 to 15	51	1	8	12	6	0	27	
16 to 30	47	2	10	11	5	0	28	
31 to 45	51	0	4	4	1	0	9	
46 and over	50	0	2	4	1	1	8	
All farms	49	3	24	31	13	1	72	

1/ Average number of cows milked during 1942 compiled from farm schedules.

Table 17. - Distribution of farms by size of herd and by type of labor force, 1942 ^{1/}

Size of herd ^{2/}	Number of farms								Total
	Operator only	Operator and unpaid family workers	Operator and unpaid family plus seasonal workers	Operator and unpaid family plus regular workers	Operator and unpaid family plus seasonal and regular workers	Operator plus regular workers	Operator plus seasonal workers	Operator plus seasonal and regular workers	
15 or less	1	3	11	2	3	0	1	6	27
16 to 30	0	2	7	5	9	2	0	3	28
31 to 45	0	0	1	2	4	0	0	2	9
46 and over	0	0	0	4	2	1	0	1	8
All farms	1	5	19	13	18	3	1	12	72

^{1/} Labor force on farm at any time during year

^{2/} Average number of cows milked during 1942. Compiled from farm schedules.

Table 18. - Manpower survey of Bates County, Missouri, October 8, 1942 1/

Item	Number
Men and boys 14 years of age and over in county, October 1940	2,181
Heads of families	1,561
Number of these 2,181 men and boys still in Bates County, October 1942	1,659
Number of these 2,181 men and boys who had left Bates County October 1941 - October 1, 1942 or expected to leave soon	532
Destination of 532 men and boys who had left or expected to leave soon:	
Gone to military service	194
Gone to war industry	89
Gone to other employment <u>2/</u>	132
Expect to be called soon for military service	117

1/ This survey covered 72 school districts and over half of the farmers in Bates County.

2/ Probably includes several who went to war industry.

Source: County Agent, Butler, Mo.

Table 19. - Distribution of surveyed dairy farms according to number of war units, 1942 1/

Number of war units	Dairy herd size						
	All farms	8-15 cows	16-30 cows	31-45 cows	46 cows & over		
	No.	Pct.	Number	Number	Number	Number	
Total	72	100.0	27	28	9	8	
1-15	2	2.8	2	0	0	0	
16-31	17	23.6	12	5	0	0	
32-47	24	33.3	11	13	0	0	
48-63	12	16.7	2	6	4	0	
64-79	8	11.1	0	3	4	1	
80-95	2	2.8	0	0	0	2	
96 & over	7	9.7	0	1	1	5	

1/ War unit standards shown in Selective Service Local Board Release No. 168 effective November 30, 1942

Table 20. - Number of surveyed dairy farms by war units 1/ per farm and number of male workers 2/ on the farm, October 1, 1942

War units	Total	One-man farms	Two-man farms	Three-man farms	Four-or more-man farms
Total	72	27	26	9	10
1-15	2	2	0	0	0
16-31	17	11	6	0	0
32-47	24	12	12	0	0
48-63	12	2	3	6	1
64-79	8	0	4	2	2
80-95	2	0	0	1	1
96 & over	7	0	1	0	6

1/ War unit standards shown in Selective Service Local Board Release No. 168 effective November 30, 1942

2/ Includes male family workers and male regular hired workers 16 years of age and over reported doing farm work. Does not include male seasonal workers.

Table 21. - Number of regular workers coming to farms, by size of herd and by source of workers
January 1, 1942 to November 20, 1942.

Size of herd <u>1/</u>	Number of workers						
	Total	From farms in the area Other dairy	From farms in the area Non-dairy	From farms elsewhere	From nonfarm employment	From nonfarm not working	Other, and unknown
8 to 15	5	1	3	0	1	0	0
16 to 30	25	2	5	12	2	2	2
31 to 45	22	0	6	8	6	2	0
46 and over <u>2/</u>	23	7	7	3	4	2	0
All farms <u>2/</u>	75	10	21	23	13	6	2
Percentage of total:	100.0	13.3	28.0	30.7	17.3	8.0	2.7

1/ Average number of cows milked during 1942.

2/ The schedule for one operator was incomplete on these items and hence was omitted. This operator did have an extremely high turn-over of workers.

Compiled from farm schedules.

Table 22. - Number of regular workers leaving farms, by size of herd, and by destination of worker,
January 1, 1942, to November 20, 1942

Size of herd <u>1/</u>	Number of workers									
	Total	To other farms in area		To farms:	To armed forces		To nonfarm jobs		Other	Unknown
		Dairy	Non-dairy	else-where:	By selective service	By enlistment	War industries	Private industries		
8 to 15	7	0	3	0	1	0	0	2	1	0
16 to 30	36	4	2	2	5	3	5	4	0	11
31 to 45	32	0	1	3	4	1	16	5	1	1
46 and over <u>2/</u>	21	0	1	1	2	2	10	3	1	1
All farms <u>2/</u>	96	4	7	6	12	6	31	14	3	13
Percentage of total	100.0	4.1	7.3	6.3	12.5	6.3	32.3	14.6	3.1	13.5

1/ Average number of cows milked during 1942.

2/ The schedule for one operator was incomplete on these items, and hence was omitted. This operator did have an extremely high turn-over of workers.

Compiled from farm schedules.

Table 23.--Number of man-months of labor contributed on surveyed farms
by type of worker, sex, and age groups and by size of dairy
herd^{1/} during 1942^{2/}

Type of worker, sex, age group	Size of dairy herd									
	All									
	farms	8-15 cows	16-30 cows	31-45 cows	46 cows and over					
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Total, all workers	:2,169	100.0	569	100.0	771	100.0	433	100.0	396	100.0
Total, family workers	:1,324	61.0	429	75.4	563	73.0	215	49.6	117	29.6
Male total	:1,169	53.9	380	66.8	484	62.8	202	46.6	103	26.0
Under 18 years	: 76	3.5	24	4.2	39	5.1	3	0.7	10	2.5
18 - 19	: 79	3.6	3	0.5	29	3.8	44	10.1	3	0.8
20 - 34	: 258	11.9	78	13.7	122	15.8	52	12.0	6	1.5
35 - 44	: 210	9.7	47	8.3	108	14.0	31	7.2	24	6.1
45 - 64	: 444	20.5	168	29.5	168	21.8	60	13.8	48	12.1
65 and over	: 102	4.7	60	10.6	18	2.3	12	2.8	12	3.0
Female total	: 155	7.1	49	8.6	79	10.2	13	3.0	14	3.6
Under 18 years	: 9	0.4	6	1.1	2	0.2	1	0.2	0	0
18 - 44	: 64	2.9	18	3.2	40	5.2	4	0.9	2	0.5
45 and over	: 76	3.5	23	4.0	37	4.8	8	1.9	8	2.1
Age unknown	: 6	0.3	2	0.3	0	0	0	0	4	1.0
Hired regular workers	: 760	35.1	106	18.6	177	23.0	206	47.6	271	68.4
Male total	: 754	34.8	106	18.6	174	22.6	203	46.9	271	68.4
Under 18 years	: 11	0.5	0	0	2	0.3	1	0.2	8	2.0
18 - 19	: 51	2.4	12	2.1	12	1.6	12	2.8	15	3.8
20 - 34	: 309	14.2	39	6.9	95	12.3	46	10.6	129	32.6
35 - 44	: 119	5.5	12	2.1	24	3.1	28	6.5	55	13.9
45 - 64	: 199	9.2	36	6.3	40	5.2	59	13.6	64	16.1
65 and over	: 17	0.8	7	1.2	1	0.1	9	2.1	0	0
Age unknown	: 48	2.2	0	0	0	0	48	11.1	0	0
Female total	: 6	0.3	0	0	3	0.4	3	0.7	0	0
Under 18 years	: 3	0.2	0	0	3	0.4	0	0	0	0
18 - 44	: 3	0.1	0	0	0	0	3	0.7	0	0
45 and over	: 0	0	0	0	0	0	0	0	0	0
Hired seasonal workers	: 85	3.9	34	6.0	31	4.0	12	2.8	8	2.0
Male total	: 85	3.9	34	6.0	31	4.0	12	2.8	8	2.0
Under 18 years	: 9	0.4	5	0.9	4	0.5	0	0	0	0
18 - 19	: 7	0.3	2	0.4	1	0.1	2	0.5	2	0.5
20 - 34	: 14	0.6	1	0.2	8	1.0	5	1.1	0	0
35 - 44	: 24	1.1	15	2.6	5	0.7	2	0.5	2	0.5
45 - 64	: 21	1.0	9	1.6	10	1.3	0	0	2	0.5
65 and over	: 2	0.1	0	0	2	0.3	0	0	0	0
Age unknown	: 8	0.4	2	0.3	1	0.1	3	0.7	2	0.5

^{1/} Based on number of dairy (and dual purpose) cows milking.

^{2/} Distribution of man-months for Jan. 1- Nov. 15, 1942, by type of labor was projected for Nov. 15- Dec. 30, 1942 in order to obtain the full 1942 situation.

Table 24.--Change in bank debits and department store sales,
Kansas City, Missouri, by specified time periods^{1/}.

Period	Department store sales	Bank debits
9 months 1942 cf. 9 months 1941	+ 14	+ 18
September 1942 cf. September 1941	+ 19	+ 29
October 1942 cf. October 1941	<u>2/</u> + 39	+ 42

1/ Transit receipts first 10 months of 1942 reported at 34 percent higher than same period in 1941.

2/ Preliminary.

Source: Monthly Review, Tenth Federal Reserve District.

Table 25.--Purchases of milk from producers and other sources as to sales usage in the Kansas City, Missouri, marketing area,*
by years 1936-40, by months 1941-42

Year and month	Class I	Class II	Class III	Total
	Pounds	Pounds	Pounds	Pounds
1936	43,565,193	22,958,341	8,551,050	75,074,584
1937	43,271,561	20,495,886	13,332,249	77,099,696
1938	42,711,648	21,174,170	24,647,544	88,533,362
1939	41,903,054	21,333,617	28,934,882	92,171,553
1940	43,154,545	23,419,703	21,608,272	88,182,520
1941: ^{1/}				
January	4,121,384	2,138,052	1,046,548	7,305,984
February	3,762,769	1,973,069	1,108,100	6,843,938
March	4,129,983	2,215,373	1,487,150	7,832,506
April	3,960,300	2,154,074	2,049,406	8,163,780
May	4,098,504	2,229,482	2,782,702	9,110,688
June	3,908,553	2,007,122	2,629,345	8,545,020
July	4,032,085	1,928,880	2,915,222	8,876,187
August	4,080,669	1,969,402	2,752,694	8,802,765
September ^{2/}	4,304,293	2,147,836	1,945,413	8,397,542
October ^{3/}	4,475,839	2,219,923	773,025	7,468,787
November	4,545,913	2,236,629	544,045	7,326,587
December	4,729,543	2,555,256	674,926	7,959,725
Total	50,149,835	25,775,098	20,708,576	96,633,509
1942:				
January	4,852,579	2,431,273	590,060	7,873,912
February	4,266,290	2,192,833	749,616	7,208,739
March	4,880,689	2,520,008	607,814	8,008,511
April	4,850,630	2,507,595	1,064,836	8,423,061
May	5,083,296	2,657,397	1,969,960	9,710,653
June	5,182,523	2,415,107	1,673,563	9,271,193
July	5,381,163	2,352,124	1,521,586	9,254,873
August	5,725,818	2,519,090	977,811	9,222,719
September	5,897,395	1,660,577	--	7,557,972
September ^{4/}	--	(478,719)	--	(478,719)
October	6,444,353	514,645	--	6,958,998
October ^{5/}	(135,997)	(1,785,348)	--	(1,921,345)
Total	52,700,733	24,034,716	9,155,246	5/85,890,695

*Includes Kansas City, Mo., only.

^{1/} Preliminary.

^{2/} September 1 - October 1, 1941.

^{3/} October 2-31 inclusive.

^{4/} Milk used in Class I or II but received from other sources.

^{5/} Includes milk from other sources.

Source: Federal Milk Market Administrator, Kansas City, Mo.

Table 26.--Average feed prices per hundredweight, by specified periods, Kansas City, Missouri^{1/}

Period	Corn	Oats	Bran	Cottonseed meal
	Dollars	Dollars	Dollars	Dollars
November 1937	1.40	1.38	0.98	1.61
November 1938	1.06	0.98	0.73	1.57
November 1939	1.23	1.42	1.02	1.90
November 1940	1.35	1.34	1.06	1.87
November 1941	1.69	1.74	1.40	2.30
October 1941	1.59	1.59	1.36	2.28
October 1942	1.73	1.80	1.50	2.21

^{1/} Feed prices quoted from the weekly price list for wholesale carload or truck lots F.O.B., Kansas City, by General Mills Incorporated.

Source: Pure Milk Producers Association, Kansas City, Mo.

Table 27.--Prices paid by handlers in the Kansas City, Missouri,^{1/}
marketing area for 3.8 percent milk per hundredweight (in-
cluding premiums) delivered f.o.b. handler's plant,
by years 1937-40, by months 1941-42

Year and month	Class I	Class II	Class III	Blond price
	Dollars	Dollars	Dollars	Dollars
1937	2.70	2.15	1.61	2.41
1938	2.53	2.08	1.29	2.21 8
1939	2.40	2.05	1.21	2.060
1940	2.24	2.05	1.34	2.050
1941: ^{2/}				
January	2.20	2.05	1.39	2.08
February	2.20	2.05	1.39	2.08
March	2.20	2.05	1.42	2.065
April	2.20	2.05	1.49	2.06
May	2.20	2.05	1.57	2.07
June	2.20	2.05	1.60	2.055
July	2.20	2.05	1.55	2.04
August ^{3/}	2.30	2.05	1.58	2.0536
September ^{4/}	2.40	2.05	1.64	2.105
October	2.55	2.30	1.925	2.42
November	2.55	2.30	1.925	2.43
December	2.55	2.30	1.925	2.42
Average	2.31	2.11	1.617	2.1566
1942: ^{2/}				
January	2.55	2.30	1.925	2.455
February	2.55	2.30	1.925	2.45
March	2.55	2.30	1.8367	2.47
April	2.607	2.357	1.892	2.505
May	2.592	2.342	1.938	2.49
June	2.569	2.319	1.919	2.46
July	2.505	2.255	1.90	2.43
August	2.506	2.256	1.976	2.388
September	2.671	2.421	2.109	2.66
October	2.807	2.557	2.299	2.86

^{1/} After October 2, 1941, Leavenworth and Kansas City, Kans., are included.

^{2/} Preliminary.

^{3/} Premium paid by some handlers on Class I milk August 16-31 inclusive (20¢).

^{4/} Sept. 1 - Oct. 1, inclusive.

Source: Federal Milk Market Administrator, Kansas City, Mo.

Table 28.--Milk-grain price ratio, by specified periods,
Kansas City, Missouri^{1/}

Period	Cost cwt. grain	100# milk 3.8%	Amount grain 100# milk will buy
	Dollars	Dollars	Pounds
November 1937	1.35	2.487	184
November 1938	1.07	2.096	196
November 1939	1.34	2.09	156
November 1940	1.39	2.10	151
November 1941	1.75	2.43	139
October 1941	1.67	2.42	145
October 1942	1.78	2.86	161

^{1/} Table shows the quantity of grain ration 100# 3.8 percent milk (blended price for all milk F.O.B. K.C.) will buy on a ration approved by Dairy Specialist of Missouri University. Feed prices quoted from the weekly price list for wholesale carload or truck lots F.O.B. Kansas City by General Mills Inc.

Source: Pure Milk Producers Association, Kansas City, Mo.

Table 29.--Distribution of Kansas herds in Kansas City
Milkshed by number of milk cows 1942
and by counties

Size of herd	:	:	Number of farms 1942				
	Total	Douglas	Johnson	Jefferson	Leavenworth	Wyandotte	
	: County	: County	: County	: County	: County	: County	
Total	: 5,179:	1,107	1,018	1,427	1,268	359	
0 - 15	: 4,895:	1,040	920	1,385	1,202	348	
16 - 30	: 233:	60	72	41	52	8	
31 and over	: 51:	7	26	1	14	3	

Source: Bureau of Agricultural Economics.

Table 30.--Distribution of dairy herds by acres
in crops

Size of herd ^{1/}	:	Number of farms, by acres of cropland					Total number of farms
		80 or less	81 to 160	161 to 240	241 to 320	321 and over	
15 or less	:	8	12	5	2	0	27
16 to 30	:	8	9	4	4	3	28
31 to 45	:	0	3	3	3	0	9
46 and over	:	1	1	2	2	2	8
Total	:	17	25	14	11	5	72

^{1/} Average number of cows milked during 1942 compiled from farm schedules,
Kansas City Milkshed Survey.